

Amendment "B"

Please cancel claims 9 and 10, without prejudice; please amend claims 11 and 13 as indicated below. The state of the claims following this Amendment "B" is as follows:

Claim 1 (original). A securing apparatus configured to secure a coupling of a first connector to a compatible second connector, the apparatus comprising:

a moveable securing member configured to be moved from a first position which prevents the first and second connectors from being decoupled, to a second position which allows the first and second connectors to be decoupled; and

an actuator configured to move the securing member between the first and second positions, the actuator being responsive to an authorization command.

Claim 2 (original). The securing apparatus of claim 1, and wherein the first connector defines a first receiving opening configured to receive the securing member, the second connector defines a second receiving opening configured to receive the securing member, and wherein when the connectors are coupled when the receiving openings are at least partially in alignment.

Claim 3 (original). The securing apparatus of claim 1, and wherein the actuator comprises a solenoid.

Claim 4 (original). The securing apparatus of claim 3, and wherein the solenoid is an electrical solenoid, and further wherein the solenoid is configured to move the securing member to the first position when the solenoid is under power.

1 Claim 5 (original). The securing apparatus of claim 1, and further comprising a securing
2 member sensor configured to detect when the securing member is in the first or the
3 second position, and to generate a position signal in response thereto.

4
5 Claim 6 (original). The securing apparatus of claim 5, and wherein the position signal is
6 used to notify a user of the status of the securing member.

7
8 Claim 7 (original). The securing apparatus of claim 1, and wherein the authorization
9 command is generated by a user.

10
11 Claim 8 (original). The securing apparatus of claim 1, and wherein the authorization
12 command is generated automatically by a control unit, and wherein the control unit is
13 configured to remove the first and second connectors from service prior to authorizing
14 moving the securing member to the second position.

15
16 Claims 9-10 (canceled).

17
18 Claim 11 (currently amended). A system comprising an array of modules and a plane,
19 each module having a first connector configured to couple with a compatible,
20 corresponding second connector which is mounted to the plane, and at least one
21 interlock device, the interlock device comprising a securing member configured to be
22 moveable to a first position to engage an associated module and thereby arrest relative
23 movement between the associated module's first connector and the corresponding
24 second connector, the securing member being further configured to be moveable to a
25 second position in response to an authorization command to disengage the associated
module and thereby allow relative movement between the associated module's first
connector and the corresponding second connector; and

1 ~~The system of claim 10, and further comprising~~ a controller having a diagnostic
2 program, the diagnostic program being configured to perform diagnostics on the
3 associated module and to generate the authorization command as a service signal when
4 the diagnostic program determines that the associated module should be physically
5 removed from the system for service, and wherein the service signal is used to cause
6 the actuator to move the securing member from the first position to the second position.

7
8 Claim 12 (original). The system of claim 11, and wherein the controller is further
9 configured to cause the associated module to be removed from service with respect to
10 the plane prior to causing the actuator to move the securing member from the first
11 position to the second position.

12
13 Claim 13 (currently amended). A system comprising an array of modules and a plane,
14 each module having a first connector configured to couple with a compatible,
15 corresponding second connector which is mounted to the plane, and at least one
16 interlock device, the interlock device comprising a securing member configured to be
17 moveable to a first position to engage an associated module and thereby arrest relative
18 movement between the associated module's first connector and the corresponding
19 second connector, the securing member being further configured to be moveable to a
20 second position in response to an authorization command to disengage the associated
21 module and thereby allow relative movement between the associated module's first
22 connector and the corresponding second connector; and

23 ~~The system of claim 9, and further comprising~~ a securing member sensor
24 configured to detect when the securing member is in the first or the second position, and
25 to generate a position signal in response thereto.

1 Claim 14 (original). The system of claim 13, and wherein the position signal is used to
2 signal to a user whether the securing member is in the first or the second position.

3
4 Claim 15 (original). The system of claim 13, and wherein the securing member sensor is
5 supported by the at least one module.

6
7 Claim 16 (previously presented). A method for securing a first connector to a second
8 connector, comprising:

9 providing an arresting surface configured to restrict movement of the first
10 connector when the arresting surface is contacted by a force applied to the first
11 connector;

12 providing a moveable securing member which is configured to move between a
13 first position and a second position in response to an authorization command;

14 moving the securing member to the first position which allows relative movement
15 between the connectors;

16 moving one of the connectors relative to the other connector to bring the
17 connectors onto mating contact;

18 providing an authorization command to move the securing member from the first
19 position to the second position; and

20 in response to the authorization command, moving the securing member to the
21 second position in proximity to the arresting surface to thereby restrict relative movement
22 between the first and second connectors.

23
24 Claim 17 (original). The method of claim 16, and further comprising detecting the
25 position of the securing member, and reporting the position of the securing member to a
controller.

1 Claim 18 (original). The method of claim 16, and further comprising:
2 giving a second authorization command to move the securing member back to
3 the first position;
4 moving the securing member back to the first position in response to the second
5 authorization command; and
6 moving one of the connectors relative to the other connector to move the
7 connectors out of mating contact.

8
9 Claim 19 (original). The method of claim 18, and further comprising removing the
10 connectors from service prior to moving the securing member back to the first position.

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12 Claim 20 (original). The method of claim 18, and further comprising notifying a user
13 when the securing member has been moved back to the first position.

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15 Claims 21-29 (cancelled).

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17 (End of Amendment "B")
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